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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,415

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EXAMINER

PERRIN, JOSEPH L

ART UNIT

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/825,415	Applicant(s) KIM ET AL.	
	Examiner Joseph L. Perrin, Ph.D.	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 16-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 February 2008 has been entered.

Response to Arguments

2. Initially, with respect to the SHUNICHI reference, applicant comments on the Examiner's noting of applicant's demand for a translation of SHUNICHI notwithstanding the fact that SHUNICHI had been twice applied in a rejection and the fact it was applicant who submitted SHUNICHI to the Examiner in an information disclosure statement. Specifically, applicant falls back on the duty to disclose under § 1.56(b) with the position that applicant's submission is not an admission of prior art and that "Applicant is unaware of any duty to acquire 'a clear understanding of the submitted prior art reference'". Thus, it appears applicant has construed MPEP 704.12(a) and the duty of candor and good faith under Rule 1.56 to apply to the Examiner and not applicant. As previously noted, it was applicant who cited SHUNICHI and a partial translation (i.e. English abstract) and only after the claims were twice rejected over

SHUNICHI did applicant require a full translation of SHUNICHI as to the relevant teachings disclosed therein. This is neither in the best interest of compact prosecution nor well received. Applicant is reminded of their duty of candor in submitting a reference with a partial translation (i.e. abstract). "The duty of candor does not require that the applicant translate every foreign reference, but only that the applicant refrain from submitting partial translations and concise explanations that it knows will misdirect the examiner's attention from the reference's relevant teaching." *Semiconductor Energy Laboratory Co. v. Samsung Electronics Co.*, 204 F.3d at 1378, 54 USPQ2d at 1008. Accordingly, in response to applicant's position of not knowing of any requirement of showing clear understanding of the submitted prior art, the Examiner reminds applicant of their duty of candor as discussed above and consideration of foreign references clearly relevant to the claimed invention.

3. Applicant's arguments in view of the amendment filed 12 February 2008 have been fully considered but they are not fully persuasive.

4. Applicant's amendment has rendered moot the §102 rejection over SHUNICHI. However, the newly added limitations do not patentably distinguish of the prior art of record for at least the following reasons and reasons indicated in the rejections below.

5. Regarding the §103 rejection over SHUNICHI and OGAWA, applicant recites the newly amended claim in a general allegation that the SHINUCHI "fails to disclose, teach, or suggest, at least the [claimed] leg pad" and that OGAWA "fails to cure the deficiencies of [SHUNICHI]". However, applicant fails to support this broad allegation with any showing or evidence. Thus, given the evidence of record and the lack of any

secondary considerations, the rejection is maintained since a *prima facie* case of obviousness has properly been established.

6. Regarding OGAWA, applicant asserts that the Office is attempting to apply OGAWA as a 102 anticipatory reference. However, it appears applicant has mischaracterized the position of the Office. Contrary to applicant's assertion, OGAWA is cited for the teaching of the exact same rubber materials (i.e. the subcombination of the leg pad) of butyl rubber and block copolymers for the same use claimed by applicant of attenuating vibration and the substitution of the vibration attenuating rubber leg pad of OGAWA for the vibration attenuating rubber leg pad in the washing machine of SHINUCHI (i.e. the combination of a leg pad and washing machine) would appear to achieve the same predictable results of attenuating vibration, accordingly, is a *prima facie* obvious modification. Applicant is silent on this record with respect to any evidence or showing of secondary considerations or how such substitution of functional equivalents would produce anything other than predictable results.

7. It is noted that applicant has newly introduced language of the "hard block and soft block make a net form". As best understood, applicant is referring to the net form of the copolymer which is the conventionally known matrix configuration created in the formation block copolymer during copolymerization. This would be appreciated and well understood by one having ordinary skill in the art and, absent evidence to the contrary, does not appear to impart patentability to known block copolymers cited in the prior art.

8. Regarding the §103 rejection over SHUNICHI, OGAWA and RIEGER, applicant argues that RIEGER does not "cure the deficiencies" of SHUNICHI and OGAWA. This

is not persuasive because SHUNICHI and OGAWA are not deficient for reasons of record.

9. Similarly regarding the §103 rejection over SHUNICHI, OGAWA and YAMAMOTO, applicant argues that YAMAMOTO does not "cure the deficiencies" of SHUNICHI and OGAWA. This is not persuasive because SHUNICHI and OGAWA are not deficient for reasons of record.

10. Similarly regarding the §103 rejection over SHUNICHI, OGAWA and DONALD, applicant argues that DONALD does not "cure the deficiencies" of SHUNICHI and OGAWA. This is not persuasive because SHUNICHI and OGAWA are not deficient for reasons of record.

11. The Examiner notes that applicant's claimed invention remains rejected as being *prima facie* obvious over the prior art of record. Given the evidence of record, it appears each and every structure as claimed is known in the prior art and that substituting known vibration attenuating polymers in selecting a vibration attenuating polymer pad would achieve the same predictable result as those of the claimed invention. Applicant is urged to clearly define the claimed apparatus by structural limitations and provide proper showing or evidence for secondary considerations which comply with 37 CFR 1.111(b). General allegations of patentability without evidence or showing of how and why the claims are patentable will be considered as failure to comply with 37 CFR 1.111(b). Note that 37 CFR 1.111(b) requires applicant to specifically point out how the language of the claims patentably distinguishes them from the references. Thus, broad allegations that they "distinguish" without evidence or

proper showing of how and why (i.e. specifically) is not considered to comply with 37 CFR 1.111(b). Until such time, the invention as claimed is considered *prima facie* unpatentable.

Drawings

12. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "HS" (in the specification, paragraph [0042]) and "HB" (in Figure 6) have both been used to designate "hard blocks". Similarly, reference characters "SS" (in the specification, paragraph [0042]) and "SB" (in Figure 6) have both been used to designate "soft blocks". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

13. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

14. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, the description of the block copolymer and second material as being “configured to prevent the plastic deformation of the block copolymer” is considered new matter because the original disclosure as filed is silent with any particular recitation of a structural arrangement which prevents plastic deformation. While the original disclosure describes how a block copolymer may cause plastic deformation after a certain time period (see [0056] of the specification), the original disclosure as filed is silent with respect to any structural configuration which reasonably conveys how the structural configuration prevents plastic deformation, and no full, clear, concise and exact terms in describing such configuration (as required by 112, first paragraph) are apparent.

Applicant is urged to define the claimed apparatus by the structural limitations which are clearly and concisely described in the original disclosure as filed. Moreover, applicant reminded that broadening the original scope is impermissible and may be construed as new matter. That is, simply applying the broad “configured to” language would include additional structural configurations not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention. Thus, such broadening of the scope of the invention generally constitutes new matter.

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear what is meant by the block copolymer and second material as being "configured to prevent the plastic deformation of the block copolymer". Is there a particular structural configuration which prevents this plastic deformation? Or, is this simply an inherent property of the materials? In light of the new matter issue of the language (see above), it is not clear what "configuration" applicant intends. As best understood in light of the original disclosure as filed, such "configured" language reads on either a structural configuration or inherent property of a "material" and the claims will be examined accordingly. However, clarification and correction on the "configured to" language is still required.

Also in claim 1, it is unclear what is meant by the hard block and soft block of the block copolymer "make a net form". Is this one of many known polymer forms produced by conventional molding process, for instance, evidenced in U.S. Patent Publication No. 2002/0042451 to SUGAYA (see paragraph [0036])? Or is this simply the "net" shape created by copolymerization, generally forming the copolymer matrix which would be

well understood by one having ordinary skill in the art to exist in a block copolymer? As best understood by the original disclosure, for instance, Figure 6, the “net form” is construed to read on a block copolymer which necessarily forms a net form via the copolymerization and the claims will be examined accordingly. However, clarification is still required.

Claim Rejections - 35 USC § 103

17. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

18. Claims 1-3 & 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHUNICHI in view of U.S. Patent No. 6,028,147 to OGAWA et al. (“OGAWA”). SHUNICHI discloses a washing machine comprising a conventional outer housing (10), legs (32/27) fitted to the bottom of the cabinet, leg pads comprising a first member contacting the floor and comprising hard blocks (29/44/47) and soft blocks (28/43/46) in contact with each other and a second member (32/23) in contact with the first member for attenuating washing machine vibration (see entire document, for instance, Figures 1-6 and relative associated text). While SHUNICHI discloses the use of hard and soft block polymers and the use of first and second rubber materials in a leg pad for a washing machine to provide vibration attenuation, SHUNICHI does not appear to disclose the claimed leg pad comprising first and second members of different materials wherein one member comprises a block copolymer of hard blocks and soft blocks which make a net form.

OGAWA teaches that it is known to provide selected block copolymers for their desired dampening properties (see, for instance, col. 10, lines 46-59) and the use of butyl rubber (i.e. a first member/material) with the block copolymers (i.e. a second member/material) (see, for instance, col. 12, lines 25-30). Thus, all of the component parts are known in SHUNICHI and OGAWA. The only difference is the combination of “old elements” into a single dampener by combining the block copolymer of SHUNICHI and the butyl rubber of OGAWA. It would have been obvious to one having ordinary skill in the art to combine the butyl rubber member of OGAWA with the block copolymer leg dampening member of SHUNICHI to achieve the predictable results of producing desired dampening properties based on known dampening properties of selected dampening materials. Regarding the terminology “net form”, as best understood from the original disclosure this refers to the “net” shaped matrix formed from copolymerization of different polymers (i.e. a block copolymer) which would be an inherent property of a block copolymer matrix including the block copolymers disclosed in OGAWA, particularly given the fact that the block copolymers of OGAWA are of the same materials of those claimed by applicant. If applicant disagrees, applicant is urged to provide evidence to the contrary.

Regarding claims 11-12, SHUNICHI discloses the use of elastic block polymers as vibration dampers in washing machine legs as claimed but does not expressly disclose how the leg pad and leg are connected (notwithstanding the fact that the leg pad and leg are clearly connected by some type of connecting means). OGAWA teaches that it is known in the polymer manufacturing art to apply an elastomeric block

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polymer with damping properties using conventional adhesive means including insert molding (also readable on an “adhesive”; see col. 12, lines 40-50). Re claim 14, Figure 4 also shows one block being located between the top and bottom portion of another block which reads on a “the first member ... projection passed through the second member”.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the block polymer leg pads of SHUNICHI by conventional polymer molding or forming processes such as insert molding and the like (also readable on an “adhesive”) as described by OGAWA in order to arrive at applicant’s invention. Such conventional polymer molding and forming processes would be well within the knowledge generally available to one having ordinary skill in the art and, absent secondary considerations, such conventional processes are not considered a point of novelty.

19. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHUNICHI and OGAWA, and further in view of RIEGER. Recitation of SHUNICHI and OGAWA are repeated here from above. SHUNICHI discloses the use of elastic polymers as vibration dampers in washing machine legs as claimed but does not expressly disclose any material detail such as the types of polymers or the properties associated therewith (i.e. typical polymer properties such as glass transition temperature or shore hardness). RIEGER discloses that it is known that block polymers may be used for vibration dampening (see col. 6, line 27) and in household appliances

(col. 6, line 44), and that such block polymers may have specific glass transition temperatures (-50 ~ 30°C glass transition temperature range; see col. 3, line 49 *et seq.*) and specific shore hardness (i.e. a shore hardness of 30 to achieve “superior softness”; see col. 4, line 29 *et seq.*) which are dependent on the type of material and is adjustable based on material of the polymer.

Therefore, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to select the material polymer/copolymer based on desired application (i.e. increasing or decreasing hardness/softness), as described in RIEGER, in a washing machine dampening structure as described in SHUNICHI and OGAWA in order to achieve desired properties such as hardness/softness, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

20. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHUNICHI in view of OGAWA, and further in view of YAMAMOTO. Recitation of SHUNICHI and OGAWA are repeated here from above. SHUNICHI discloses the use of elastic polymers as vibration dampers in washing machine legs as claimed but does not expressly disclose any material detail of the polymer composition. YAMAMOTO teaches that it is known in the elastomeric polymer art to use polystyrene as a hard block and vinyl-polyisoprene as a soft block in a block copolymer blended with styrene-

butadiene-styrene to form an elastomeric composition useful in applications such as vibration damping (see abstract).

Therefore, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to select the vibration damping polymer/copolymer of YAMAMOTO in a washing machine dampening structure as described in SHUNICHI in order to provide an elastomeric composition with vibration dampening properties in washing machine legs. Moreover, there would be a reasonable expectation of success in applying the elastomeric polymer of YAMAMOTO in the washing machine legs of SHUNICHI and OGAWA in order to achieved the desired vibration damping properties associated with the disclosed elastomeric polymer composition.

21. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over SHUNICHI in view of OGAWA, and further in view of DONALD. Recitation of SHUNICHI and OGAWA are repeated here from above. While SHUNICHI and OGAWA, in the aggregate, disclose the use of a first material of block copolymers having hard and soft segments and a second material of butyl rubber for their desired properties, neither reference discloses duplicating the first material as a third material. DONALD teaches common knowledge flexible block copolymers including “triblock” and “multi-block” (col. 4, lines 26-28) and their use in “major appliances” as “vibration dampers” (col. 30, lines 33-34). Therefore, the position is taken that the combination of “old elements” for their intended purpose to achieve the predictable results of providing

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dampening to an appliance would have been obvious to one having ordinary skill in the art since such diblock and triblock polymers are common knowledge in the art and using plural blocks would have been an obvious modification since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8; *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Moreover, it would have been common sense to one having ordinary skill in the art to combine dampening materials in order to achieve the predictable results of their inherent dampening properties and the selection of such known dampening materials to achieve dampening properties would have resulted in a reasonable expectation of success.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent Publication No. 2002/0042451 to SUGAYA, which discloses block copolymers and evidences the known forms of molding polymer resins including net forming.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 8:00-4:30.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/
Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1792

JLP